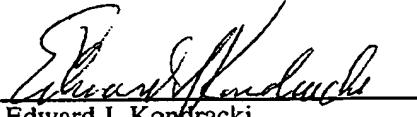


REMARKS

The Preliminary Amendment is made to eliminate informalities in the specification, claims and abstract resulting from a literal translation of the French text, and to insert headings to conform the application to U.S. practice.

The present application is believed to be in condition for examination, which action is earnestly solicited.

Respectfully submitted,
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Marked Up Version With Markings To Show Changes Made

IN THE SPECIFICATION:

Page 1, line 3

The field of the invention is that of communication networks and are more particularly, communication networks using[. In order to communicate] data terminal equipment units (DTEs) [adapted to] use various protocols.

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VFER [-] \equiv VFEp - Diff.

IN THE CLAIMS:

1. A method [Method] for reducing congestion in a network layer (16) of a router machine (15) when [it] said network layer (16) accumulates in a queue (20) datagrams (12) to be transmitted through a first network (18), [characterized in that it comprises] comprising:
 - a first step (29) [that measures] measuring a fullness level of said queue (20), in order to generate a signal (NIV) based on said fullness level;
 - a second step (30) [that detects] detecting any datagram received from said network (18), wherein a field (28) of a first transport layer (6) contains a received window value (VFR);
 - a third step (31) [that generates] generating a sent window value (VFE) based on said signal (NIV) in order to process the detected datagram by entering said sent window value (VFE) into said received window value [it] in said field (28), the sent window value (VFE) being at least equal to a remaining window value (VFER)

14 representing, for each connection established, the number of bytes transmittable at the
15 time it is generated;

16 - a fourth step (32) that routes [routing] the processed datagram through a
17 second network (17) to a second transport layer (4), which limits said transport layer
18 (4) [its] send rate based on the sent window value (VFE).

1 2. The method [Method] according to claim 1, [characterized in that]
2 wherein the signal (NIV) is generated by [means of] a binary function that results in
3 an alarm state when the fullness level of the queue (20) exceeds a first threshold
4 value.

1 3. The method [Method] according to claim 1, [characterized in that]
2 wherein the signal (NIV) is generated by means of a polynomial function proportional
3 to the fullness level and inversely proportional to the capacity of the queue (20).

1 4. The method [Method] according to claim 2, [characterized in that]
2 wherein the sent window value (VFE) is generated by limiting the received window
3 value (VFR) when the signal (NIV) is in the alarm state.

1 5. [Device] A device for reducing congestion in a network layer (16) of a
2 router machine (15) when it accumulates, in a queue (20) in a memory of said router
3 machine (15), datagrams (12) to be transmitted through a first network (18),
4 [characterized in that it comprises] comprising means (33) in said memory for
5 detecting any datagram received from said [first] network (18) wherein a field (28) of
6 a first transport layer (6) contains a received window value (VFR), and means for

7 entering a sent window value (VFE) into said received window value (VFR) [it] based
 8 on a fullness level (26) of said queue (20) before routing the detected datagram
 9 through a second network (17) to a transport layer (4), said second transport layer(4)
 10 configured to limit [which limits] its send rate based on the sent window value (VFE),
 11 the sent window value (VFE) being at least equal to a remaining window value
 12 (VFER) representing, for each connection established, the number of bytes
 13 transmittable at the time said number of bytes [it] is generated.

IN THE ABSTRACT:

A router machine (15) is configured to implement [constituting the router
 implements] a method [according to the invention] for reducing congestion in its
 network layer (16) when it accumulates in a queue (20) datagrams (12) to be
 5 transmitted through a network (18). The method comprises: a first step (29) that
 measures a fullness level of [said] queue (20), in order to generate a signal (NIV)
 based on said fullness level[:]. A [a] second step (30) [that] detects any datagram
 received from [said] network (18), wherein a field (28) of a transport layer (6)
 contains a received window value (VFR) [:]. A [a] third step (31) [that] generates a
 10 sent window value (VFE) based on [said] signal (NIV) in order to process the
 detected datagram by entering [said] value (VFE) into said received window value
(VFR) [it] in [said] field (28) [:]. A [a] fourth step (32) [that] routes the processed
 datagram through a network (17) to a transport layer (4), which limits its send rate
 based on the sent window value (VFE).

15 [Fig. 4]